

ABSTRACT OF THE DISCLOSURE

A multilevel texture mapping process for a 3D model which maps different perspective images onto a 3D model is developed. The textures mapped to the 3D model are processed from image level to texture level, then to pixel level to ease the edge appearance problem at the boundary where neighboring images are stitched together caused by different lighting and viewing parameters. The result shows that the smooth transition between neighboring textures provides better visual quality than just blending the boundary where neighboring images stitched.